NAO-0001

IN THE CLAIMS

Claim 1. (Previously presented) An asymmetric supercapacitor comprising:

a positive electrode comprising a current collector and an active material selected from the group consisting of manganese dioxide, silver oxide, iron sulfide and mixtures thereof;

a negative electrode comprising carbonaceous active material;

an aqueous electrolyte solution; and

a separator plate.

Claim 2. (Original) The asymmetric supercapacitor of Claim 1 wherein the negative electrode further comprises a current collector.

Claim 3. (Original) The asymmetric supercapacitor of Claim 2 wherein the current collector is selected from the group consisting of metal foil, metal mesh, electrically conductive polymer composites and expanded metal.

Claim 4. (Original) The asymmetric supercapacitor of Claim 1 wherein the carbonaceous active material comprises nanofibrous materials.

Claim 5. (Original) The asymmetric supercapacitor of Claim 4 wherein the carbonaceous active material is discrete carbon fibers less than 10 microns in diameter.

Claim 6. (Original) The asymmetric supercapacitor of Claim 5 wherein the carbonaceous active material is carbon fibers less than 100 nm in diameter.

Claim 7. (Original) The asymmetric supercapacitor of Claim 6 wherein the carbonaceous active material is carbon fibers less than 50 nm in diameter.

Claim 8. (Original) The asymmetric supercapacitor of Claim 1 wherein the negative electrode has a thickness about 50 microns to about 375 microns.

Claim 9. (Original) The asymmetric supercapacitor of Claim 1 wherein the carbonaceous active material is non-woven mat, woven cloth or two dimensional sheet comprising carbonized polymer.

Claim 10. (Original) The asymmetric supercapacitor of Claim 1 wherein the negative electrode further comprises a collection coating.

Claim 11. (Original) The asymmetric supercapacitor of Claim 1 wherein the positive electrode active material comprises manganese dioxide.

Claim 12. (Original) The asymmetric supercapacitor of Claim 11 wherein the manganese dioxide is nanostructured.

Claim 13. (Original) The asymmetric supercapacitor of Claim 1 wherein the positive electrode active material is nanostructured.

Claim 14. (Original) The asymmetric supercapacitor of Claim 1 wherein the active material is applied to the current collector by thermal spray.

Claim 15. (Original) The asymmetric supercapacitor of Claim 1 wherein the positive electrode further comprises a binder.

Claim 16. (Original) The asymmetric supercapacitor of Claim 1 wherein the current collector is selected from the group consisting of metal foil, metal mesh, electrically conductive polymer composites and expanded metal.

Claim 17. (Original) The asymmetric supercapacitor of Claim 1 wherein the positive electrode thickness is less than about 250 microns.

Claim 18. (Original) The asymmetric supercapacitor of Claim 17 wherein the positive electrode thickness is less than about 50 microns.

Claim 19. (Cancelled)

Claim 20. (Previously Presented) The asymmetric supercapacitor of Claim 1 wherein the aqueous electrolyte is selected from the group consisting of aqueous solutions of hydroxides of alkali metals, aqueous solutions of carbonates of alkali metals, sulfuric acid and mixtures thereof.

Claim 21. (Original) An asymmetric supercapacitor comprising;

a positive electrode comprising a current collector and manganese dioxide;

a negative electrode comprising carbonaceous active material;

an aqueous electrolyte solution; and a separator plate.

Claim 22. (Original) The asymmetric supercapacitor of Claim 21 wherein the carbonaceous active material is nanofibrous.

Claim 23. (Original) The asymmetric supercapacitor of Claim 21 wherein the manganese dioxide is nanostructured.

Claim 24. (Original) The asymmetric supercapacitor of Claim 21 wherein the carbonaceous active material is nanofibrous and the manganese dioxide is nanostructured.

Claim 25. - 29. (Cancelled)